Summary Technical Data Sheet

Aqua Glass 38

Product Name: Aqua Glass 38

Synonyms: Sodium Silicate,

Liquid Sodium Silicate, Water glass

CAS Number: 1344-09-8

Formula: Na_2O x SiO (x ≥ 3.00 by wt.)

Appearance: clear or slightly hazy liquid

Product Specifications

Property	Specification
Assay, % Solids	36.50 -38.5 %
Na_2O Content	8.5 – 9.5 %
SiO_2 Content	28.0 – 30.0 %
Ratio (SiO_2:Na_2O)	3.15 – 3.25
Density at 20°C, °Baumé	40.5 – 41.5 °Bé
Viscosity	141 – 250 cps
Specific Gravity at 20°C	approx. 1.39 – 1.41

Aqua Glass 38 is an alkaline liquid silicate known as water glass that is colourless, and viscous and displays little tack. It is non-flammable, non-toxic, and non-explosive, however, it is hazardous to eyes and skin because of its high alkalinity. It is found in many different markets with an array of applications.

1. Ceramics

- casting use silicate as deflocculant to increase solids
- clay refining use silicate as deflocculant to improve fluidity
- thinner paste with silicate as deflocculant to reduce water.

2. Construction

- excellent concrete and chimney sealer and hardener, which eliminates dust, grease, water penetration through calcium silicate hydrate (CSH) bonding with strength.
- acid proofs cement
- great bonding agent for laminating plywood
- cement slurry thinner
- soil solidification and strong stabilizer

The above information, while not guaranteed, reflects our analysis and believed to be accurate. It is the end user's responsibility, prior to use of the above mentioned product to determine the suitability of the product. Aqua Bond shall not be, directly or indirectly responsible for damages of any nature whatsoever resulting from the use or reliance upon the above information.

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3. Cosmetic and Personal Care

- alkaline pH control and buffering agent

4. Metals

- silicates are used to impregnate porous castings
- binder for welding rod covers for flux action
- binder for fast setting casting molds and binders
- agglomeration to remove dust and improve environment for smelting powder
- binder for pelletizing and briquetting

5. Paper Industry

- fiber drums and spiral tubing use silicates for adhesion adding rigidity and lowering cost
- adhesive for laminating and labeling
- coverings for film formation on paper as resistance to moisture and grease-proof
- raw water treatment flocculation with silicates to provide greater clarity in effluent from paper process

6. Petroleum

- colloidal control for drilling mud
- corrosion preventing
- emulsion breaker to separate water and oil

7. Textiles

- pH buffer for dyes and ink fixing
- as peroxide bleach

8. Water treatment

- as an aid to increase the size and accelerate formation of flocculant in water treatment
- control of lead and copper in water to reduce level of toxic metals
- coagulation aid and corrosion protection
- iron and manganese stabilization/fixation

Storage and Handling: Keep containers tightly closed in a cool, dark, ventilated place.

Packaging: 24 kg UN Tighthead, 260 kg Drum, 1300 kg Tote

Transport Regulations: Not regulated as dangerous goods (for reference only).

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